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EXAMINER

MAIER, CHRISTOPHER J

ART UNIT

PAPER NUMBER

2675

DATE MAILED: 04/22/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/420,787

Applicant(s)

DANIELS, TED

Examiner

Christopher J. Maier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 22 March 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) 1,5,17,25,29 and 35-47 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-4,6-16,18-24,26-28,31-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 18, 30, 2-4, 6-8, 10-15, and 21-24, are rejected under 35 U.S.C. 103(a) as being unpatentable over Lucente et al (U.S. Patent No. 5,287,245) in view of Klein et al (U.S. Patent No. 6,205,021 B1) and in further view of Armitage (U.S. Patent No. 6,282,082).

As to claims 18 and 30, Lucente discloses a removable, wireless keyboard in figure 5, item 18 and column 5, lines 22-28.

Lucente does not disclose a portable personal computer comprising a base having a controller for controlling operations thereof; a removable wireless input device for communicating with the controller in the base through a signal interface when mounted into the base or through a wireless connection when removed from the base; or that the input device has an upper surface, a lower surface and at least one side surface with at least one of the lower surface and the at least one side surface being received in the recess when the input device is mounted in the base. Further, Lucente

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does not disclose that the removable keyboard has a power supply independent of the base, and that the power supply includes an external alternating current power adapter.

Klein discloses a portable personal computer comprising a base having a controller for controlling operations thereof in figure 2 and column 1, lines 24-63. Klein further discloses a display attached to the base in figure 2, item 81. Klein also discloses a removable wireless input device for communicating with the controller in the base through a signal interface when mounted into the base or through a wireless connection when removed from the base in figure 2, item 51 and column 2, lines 24-63. Klein further discloses that the input device has an upper surface, a lower surface and at least one side surface with at least one of the lower surface and the at least one side surface being received in the recess when the input device is mounted in the base in figure 2.

Armitage discloses a removable keyboard has a power supply independent of the base, and that the power supply includes an external alternating current power adapter in column 8, lines 43-62.

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the removable, wireless input device of Klein with the removable, wireless keyboard of Lucente because both deal with input devices for portable computers and the removable keyboard for a portable keyboard allows it to be positioned in a more ergonomic manner, Lucente, column 1, lines 45-63. Further, it would have been obvious to add the AC connector and battery means of Armitage because the removable, wireless keyboards of Lucente and Klein need some form of power source in order to operate in connection with the base of the computer.

As to claim 2, Lucente does not disclose discloses that the base has at least one infrared device for receiving infrared signals.

Klein discloses that the base has at least one infrared device for receiving infrared signals in figure 2, item 74 and column 6, lines 42-62.

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the removable, wireless input device of Klein with the removable, wireless keyboard of Lucente because both deal with input devices for portable computers and the removable keyboard for a portable keyboard allows it to be positioned in a more ergonomic manner, Lucente, column 1, lines 45-63.

As to claim 3, Lucente does not disclose that the input device has at least one infrared device for transmitting infrared signals.

Klein discloses that the input device has at least one infrared device for transmitting infrared signals in figure 2, item 74 and column 6, lines 42-62.

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the removable, wireless input device of Klein with the removable, wireless keyboard of Lucente because both deal with input devices for portable computers and the removable keyboard for a portable keyboard allows it to be positioned in a more ergonomic manner, Lucente, column 1, lines 45-63.

As to claim 4, Lucente does not disclose that the recess is sized to receive both the lower surface and the at least one side surface of the wireless input device

Klein discloses that the recess is sized to receive both the lower surface and the at least one side surface of the wireless input device in figure 2.

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It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the removable, wireless input device of Klein with the removable, wireless keyboard of Lucente because both deal with input devices for portable computers and the removable keyboard for a portable keyboard allows it to be positioned in a more ergonomic manner, Lucente, column 1, lines 45-63.

As to claim 6, Lucente does not disclose that the wireless keyboard includes a pointing device.

Klein discloses that the wireless input device includes a pointing device in figure 2, item 51 and column 2, lines 45-63.

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the removable, wireless input device of Klein with the removable, wireless keyboard of Lucente because both deal with input devices for portable computers and the removable keyboard for a portable keyboard allows it to be positioned in a more ergonomic manner, Lucente, column 1, lines 45-63.

As to claim 7, Lucente does not disclose that the wireless keyboard includes a pointing device functions as a computer track ball apparatus.

Klein discloses that the pointing device functions as a computer track ball apparatus in figure 4, item 58 and column 2, lines 45-63.

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the removable, wireless input device of Klein with the removable, wireless keyboard of Lucente because both deal with input devices for

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portable computers and the removable keyboard for a portable keyboard allows it to be positioned in a more ergonomic manner, Lucente, column 1, lines 45-63.

As to claim 8, Lucente does not disclose that the wireless keyboard includes a pointing device that functions as a computer touch pad apparatus

Klein discloses that the pointing device functions as a computer touch pad apparatus in figure 2, item 51 and column 2, lines 45-63.

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the removable, wireless input device of Klein with the removable, wireless keyboard of Lucente because both deal with input devices for portable computers and the removable keyboard for a portable keyboard allows it to be positioned in a more ergonomic manner, Lucente, column 1, lines 45-63.

As to claim 10, Lucente does not disclose that the signal interface includes an infrared connection.

Klein discloses that the signal interface includes an infrared connection in figure 2, items 73-74 and column 6, lines 42-62.

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the removable, wireless input device of Klein with the removable, wireless keyboard of Lucente because both deal with input devices for portable computers and the removable keyboard for a portable keyboard allows it to be positioned in a more ergonomic manner, Lucente, column 1, lines 45-63.

As to claim 11, Lucente does not disclose that the signal interface includes a radio frequency connection.

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Klein discloses that the signal interface includes a radio frequency connection in column 2, lines 45-63.

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the removable, wireless input device of Klein with the removable, wireless keyboard of Lucente because both deal with input devices for portable computers and the removable keyboard for a portable keyboard allows it to be positioned in a more ergonomic manner, Lucente, column 1, lines 45-63.

As to claim 12, Lucente does not disclose that the wireless keyboard further includes an infrared transducer

Klein discloses that the removable wireless input device further includes an infrared transducer in figure 2, item 73 and column 6, lines 42-62.

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the removable, wireless input device of Klein with the removable, wireless keyboard of Lucente because both deal with input devices for portable computers and the removable keyboard for a portable keyboard allows it to be positioned in a more ergonomic manner, Lucente, column 1, lines 45-63.

As to claim 13, Lucente does not disclose that the wireless keyboard includes least one infrared device for at least transmitting infrared signals

Klein discloses that the removable wireless input device includes least one infrared device for at least transmitting infrared signals in figure 2, item 73 and column 6, lines 42-62.

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It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the removable, wireless input device of Klein with the removable, wireless keyboard of Lucente because both deal with input devices for portable computers and the removable keyboard for a portable keyboard allows it to be positioned in a more ergonomic manner, Lucente, column 1, lines 45-63.

As to claim 14, Lucente does not disclose that the removable wireless input device has at least first, second and third sides perpendicular to the upper and lower surfaces, and at least first and second infrared devices for at least transmitting infrared signals, the first and second infrared devices located on at least two of the first, second, and third sides of the removable wireless input device.

Klein discloses that the removable wireless input device has at least first, second and third sides perpendicular to the upper and lower surfaces, and at least first and second infrared devices for at least transmitting infrared signals, the first and second infrared devices located on at least two of the first, second, and third sides of the removable wireless input device in figure 6, item 73, and column 8, lines 27-55.

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the removable, wireless input device of Klein with the removable, wireless keyboard of Lucente because both deal with input devices for portable computers and the removable keyboard for a portable keyboard allows it to be positioned in a more ergonomic manner, Lucente, column 1, lines 45-63.

As to claim 15, Lucente does not disclose that the wireless keyboard includes a radio frequency transmitter and the base includes a radio frequency receiver.

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Klein discloses that the removable wireless input device includes a radio frequency transmitter and the base includes a radio frequency receiver in figure 2, items 73-74 and column 6, lines 42-62.

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the removable, wireless input device of Klein with the removable, wireless keyboard of Lucente because both deal with input devices for portable computers and the removable keyboard for a portable keyboard allows it to be positioned in a more ergonomic manner, Lucente, column 1, lines 45-63.

As to claim 21, Lucente does not disclose that there is at least one retaining device for securing the removable wireless input device to the base.

Klein discloses that there is at least one retaining device for securing the removable wireless input device to the base in column 5, lines 25-45.

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the removable, wireless input device of Klein with the removable, wireless keyboard of Lucente because both deal with input devices for portable computers and the removable keyboard for a portable keyboard allows it to be positioned in a more ergonomic manner, Lucente, column 1, lines 45-63.

As to claim 22, Lucente does not disclose that at least one retaining device is a spring ball bearing.

Klein discloses that at least one retaining device is a spring ball bearing in figure 5, items 38 and column 8, lines 3-19.

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It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the removable, wireless input device of Klein with the removable, wireless keyboard of Lucente because both deal with input devices for portable computers and the removable keyboard for a portable keyboard allows it to be positioned in a more ergonomic manner, Lucente, column 1, lines 45-63.

As to claim 23, Lucente does not disclose that at least one retaining device includes a tab and a slot, one of the tab and slot located on one of the removable wireless input device and the base and the other of the tab and the slot located on the other of the removable wireless input device and the base, wherein the tab fits into the slot to secure the removable wireless device to the base

Klein discloses that at least one retaining device includes a tab and a slot, one of the tab and slot located on one of the removable wireless input device and the base and the other of the tab and the slot located on the other of the removable wireless input device and the base, wherein the tab fits into the slot to secure the removable wireless device to the base in figure 5 and column 8, lines 2-19.

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the removable, wireless input device of Klein with the removable, wireless keyboard of Lucente because both deal with input devices for portable computers and the removable keyboard for a portable keyboard allows it to be positioned in a more ergonomic manner, Lucente, column 1, lines 45-63.

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As to claim 24, Lucente does not disclose an ejector mechanism for removing the removable wireless input device when the removable wireless input device is mounted in the base.

Klein discloses an ejector mechanism for removing the removable wireless input device when the removable wireless input device is mounted in the base in figure 5 and column 8, lines 2-19.

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the removable, wireless input device of Klein with the removable, wireless keyboard of Lucente because both deal with input devices for portable computers and the removable keyboard for a portable keyboard allows it to be positioned in a more ergonomic manner, Lucente, column 1, lines 45-63.

2. Claims 9, 16, 26-28 and 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lucente, Armitage and Klein in further view of Anderson et al (U.S. Patent No. 6,104,604).

As to Lucente, Armitage and Klein's disclosures, see above rejections.

As to claim 9, as dependent on claims 1 and 35, respectively, neither Klein nor Lucente disclose the transmission of the operational signals to the base over a hardwired connection when the keyboard is connected with the base.

Anderson discloses a first mating connector on a wireless keyboard and a second mating connector providing a hardwired connection in figure 4, items 140 and 240, and column 4, lines 1-10.

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It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the wireless keyboard device of Klein and Lucente with the wireless keyboard connection device of Anderson in order to consolidate parts by combining the mating connectors with data transmission and in order to provide better transmission quality than solely infrared transmission when the keyboard is connected to the housing.

As to claim 16, as dependent on claim 1, Klein discloses a first mating connector in a wireless input device in figure 5, item 63, and a second mating connector in the base of the unit in figure 5, item 38.

Neither Klein nor Lucente disclose that the mating connectors provide a hardwired connection from the wireless keyboard to the base.

Anderson discloses a first mating connector on a wireless keyboard and a second mating connector providing a hardwired connection in figure 4, items 140 and 240, and column 4, lines 1-10.

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the wireless keyboard device of Klein and Lucente with the wireless keyboard connection device of Anderson in order to consolidate parts by combining the mating connectors with data transmission and in order to provide better transmission quality than solely infrared transmission when the keyboard is connected to the housing.

As to claim 26, Klein discloses that the input device has at least one infrared device for transmitting infrared signals in figure 2, item 74 and column 6, lines 42-62.

As to claim 27, Klein discloses that the wireless input device has an upper surface and a lower surface, and at least first, second and third sides perpendicular to the upper and lower

As to claim 28, Klein discloses a first mating connector in a wireless input device in figure 5, item 63, and a second mating connector in the base of the unit in figure 5, item 38.

Neither Klein nor Lucente disclose that the mating connectors provide a hardwired connection from the wireless keyboard to the base.

Anderson discloses a first mating connector on a wireless keyboard and a second mating connector providing a hardwired connection in figure 4, items 140 and 240, and column 4, lines 1-10.

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the wireless keyboard device of Klein and Lucente with the wireless keyboard connection device of Anderson in order to consolidate parts by combining the mating connectors with data transmission and in order to provide better transmission quality than solely infrared transmission when the keyboard is connected to the housing.

As to claim 33, Klein discloses that there is at least one retaining device for securing the removable wireless input device to the base in column 5, lines 25-45.

Klein does not disclose that the wireless input device is a keyboard.

Lucente discloses a removable, wireless keyboard in figure 5, item 18 and column 5, lines 22-28.

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It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the removable, wireless input device of Klein with the removable, wireless keyboard of Lucente because both deal with input devices for portable computers and the removable keyboard for a portable keyboard allows it to be positioned in a more ergonomic manner, Lucente, column 1, lines 45-63.

As to claim 34, Klein discloses that at least one retaining device is a spring ball bearing in figure 5, items 38 and column 8, lines 3-19.

3. Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein, Armitage and Lucente in view of Kimura et al (U.S. Patent No. 6,108,716).

As to Lucente, Armitage and Klein's disclosures, see above rejections.

As to claim 19, Klein does not disclose that the power supply comprises at least one battery.

Kimura discloses that the power supply comprises at least one battery in column 13, lines 36-55.

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine a power supply independent of the base comprising at least one battery as in Kimura with the wireless input unit of Klein because batteries are well known as a portable source of power in the art.

As to claim 20, Klein does not disclose that at least one battery is charged by the base when the removable wireless input device is mounted into the base.

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Kimura discloses that at least one battery is charged by the base when the removable wireless input device is mounted into the base in column 12, lines 66-67 and column 13, lines 1-25.

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the base charging at least one battery mounted in the wireless input unit of Kimura with the wireless input unit of Klein in order to give the wireless input unit battery power combined with the capability of being recharged when the batteries lose power.

4. Claims 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein, Lucente and Anderson in view of Kimura et al.

As to Klein, Lucente and Anderson's disclosures, see above rejections.

As to claim 31, neither Klein, Lucente, Armitage nor Anderson discloses that the power supply comprises at least one battery.

Kimura discloses that the power supply comprises at least one battery in column 13, lines 36-55.

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine a power supply independent of the base comprising at least one battery as in Kimura with the wireless input unit of Klein because batteries are well known as a portable source of power in the art.

As to claim 32, neither Klein, Lucente, Armitage nor Anderson discloses that at least one battery is charged by the base when the removable wireless input device is mounted into the base.

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Kimura discloses that at least one battery is charged by the base when the removable wireless input device is mounted into the base in column 12, lines 66-67 and column 13, lines 1-25.

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the base charging at least one battery mounted in the wireless input unit of Kimura with the wireless input unit of Klein in order to give the wireless input unit battery power combined with the capability of being recharged when the batteries lose power.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chris Maier, whose telephone number is (703) 605-1213, and whose normal working hours are 7:30AM – 4:00PM ET, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Saras can be reached at (703) 305-9720.

Any response to this action should be mailed to:

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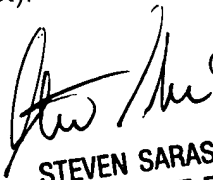
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or faxed to: (703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

cjm

April 17, 2002

 Chris Maier
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